

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

NOTICE N JO 7110.460

> Cancellation Date: January 21, 2008

SUBJ: PRECISION OBSTACLE FREE ZONE (POFZ) AND FINAL OBSTACLE **CLEARANCE SURFACES (OCS)**

- 1. PURPOSE: This notice provides modifications to Federal Aviation Administration Order (FAAO) 7110.65, Air Traffic Control, with reference to precision obstacle free zone (POFZ) and obstacle clearance surfaces (OCS) procedures.
- 2. **DISTRIBUTION**: This notice is distributed to select offices in Washington headquarters, service area offices, the William J. Hughes Technical Center, Mike Monroney Aeronautical Center, and all air traffic field facilities.
- 3. ACTION: Facility managers shall ensure that all terminal airport traffic control tower personnel are briefed on this notice prior to working an operational position.
- **4. EFFECTIVE DATE**: January 22, 2007.
- **5. BACKGROUND**: The POFZ is an FAA Airport Obstructions Standards Committee initiative (Decision Document #01b, dated December 18, 2003) to protect the area of short final during very low ceilings of less than 300 feet or visibilities less than 34-statute mile (SM) or less than 4,000 feet runway visual range (RVR). This change provides guidance to the controller on what weather conditions dictate that the POFZ must be kept clear of aircraft and vehicles.

There are currently four types of hold lines that protect runways/taxiways and the Instrument Landing System (ILS) critical area; this does not change. What does potentially change is the location of the ILS critical area hold lines (and appropriate signage). The POFZ may require the airport to position these lines so that when the low ceiling and/or visibility occur, aircraft and vehicles will remain outside the POFZ. If an aircraft or vehicle transgresses the POFZ during low visibility or ceilings, then the controller must advise any aircraft within 2 miles of the runway threshold. The majority of effort in this initiative is with the Airports Division (AAS), Flight Standards (AFS), and the local airport management. AAS has published three documents that address POFZ, Advisory Circular (AC) 150/5300-13, Change 8, Airport Design; AC 150/5340-1H, Standards for Airport Markings, Change 2; and AC 150/5340-18D, Standards for Airport Sign Systems.

Distribution: Electronic Initiated By: AJR-0 N JO 7110.460 1/22/07

Along with the POFZ, there is another surface area that must be protected. This area is called the obstacle clearance surface (OCS) and is composed of the "W," "X," and "Y" surfaces. (The description of these surface areas can be found in FAAO 8260.3b, Volume III, Chapter 3, Paragraph 3.4.) The "W," "X," and "Y" surfaces are designed to protect both sides of the final approach course when the reported weather is 800 feet or less and the visibility is 2 SM or less and the aircraft is on final within 2 NM of the runway threshold.

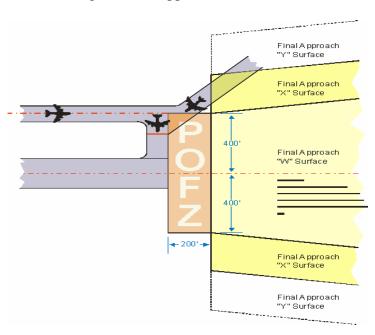
These protected surfaces are important for an aircraft executing a missed approach when its momentum may carry it below the decision altitude (DA) before the pitch, flaps, and engine power can begin a climb. This loss in altitude is such that tail heights of taxiing aircraft and those holding for departure could be a factor.

- **6. PROCEDURES**: The following paragraphs are being added to address the new procedures regarding POFZ and OCS associated with vertically guided approaches. Add Paragraph 3-7-6, Precision Obstacle Free Zone (POFZ) and Obstacle Clearance Surfaces (OCS) to read as follows:
- a. Ensure the POFZ is clear of traffic (aircraft or vehicles) when an aircraft on a vertically-guided final approach is within 2 miles of the runway threshold and the reported ceiling is below 300 feet or visibility is less than 3/4 SM to protect aircraft executing a missed approach.

NOTE -

Only horizontal surface (e.g., the wings) can penetrate the POFZ, but not the vertical surfaces (e.g., fuselage or tail.) Three hundred feet (300) is used because ATC does not measure ceilings in fifty (50) foot increments.

b. Ensure the final approach OCS (e.g., ILS/LPV W, X, and Y surfaces) are clear of aircraft/vehicles when an aircraft on the vertically-guided approach is within 2 miles of the runway threshold and the reported ceiling is below 800 feet or visibility is less than 2 SM to protect aircraft executing a missed approach.



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NOTE -

The POFZ and the close-in portion of the final approach obstacle clearance surfaces protect aircraft executing a missed approach. Their dimensions are described in FAAO 8260.3b, Volume III, Chapter 3, Paragraph 3.4, United States Standards for Terminal Instrument Procedures.

NOTE -

Vehicles that are less than 10 feet in height, necessary for the maintenance of the airport and/or navigation facilities operating outside the movement area, are exempt.

c. If it is not possible to clear the POFZ or OCS prior to an aircraft reaching a point 2 miles from the runway threshold and the weather is less than described in paragraph 6(a) or (b) above, issue traffic to the landing aircraft.

NOTE -

The POFZ and/or OCS must be cleared as soon as practicable.

PHRASEOLOGY-

[ACID], IN THE EVENT OF MISSED APPROACH (issue traffic)

TAXIING AIRCRAFT/VEHICLE LEFT/RIGHT OF RUNWAY

EXAMPLE-

- "United 623, in the event of missed approach, taxiing aircraft right of runway."
- "Delta 1058, in the event of missed approach, vehicle left of runway."

REFERENCE:

FAAO 7110.65, Traffic Information, Para 3-1-6.

7. IMPLEMENTATION: This notice must be implemented on the effective date. This notice is valid for 1 year from the date of publication, or until published in FAAO 7110.65, whichever occurs first.

These changes will be included in the August 30, 2007, updates to FAAO 7110.65 as specified in the paragraphs identified in this notice.

Michael A. Cirillo

Vice President, System Operations Services

Air Traffic Organization